

**Remarks**

Claims 2-22 are pending in the application. Of the above claims, 6 and 6-22 are withdrawn from consideration.

Claims 2-5 and 7-15 stand rejected.

Applicant wishes to thank the Examiner for extending the courtesy of an in-person interview on June 28, 2005. A brief summary of the interview is set out below.

During the interview the Examiner was shown a skeleton of a foot and a conventional moccasin. The principal claims under discussion were claims 2-4 and those were discussed primarily with respect to the Ellis reference (U.S. Patent No. 5,317,819). Applicant pointed out that the present invention defines a curved heel configuration for a midsole/outsole of a shoe which has a convex curvature of a generally spherical profile having a single radius centred at about the centre of mass of the calcaneus of a wearer's foot. Applicant pointed out that this is distinguishable from the Ellis reference which presents a flat base having curved edges, each of the edges having its own centre of curvature which are neither common nor anywhere near the centre of mass of the calcaneus of a wearer's foot.

The Examiner was receptive to the difference however deferred any comment as to patentability pending a review of the other art cited in the case. No specific language was agreed upon and it was left that Applicant would reply to set out in detail the argument presented and claim amendments consistent with the differences discussed.

Applicant acknowledges the approval of the drawing change to Figure 6.

The Examiner objected to the section lines in Figure 2 as not showing the direction in which the view was taken and not being labelled with numerals corresponding to the figure number of the sectional view.

Applicant has amended Figure 2 to include arrows and designating numerals corresponding to the figure numbers of the sectional view.

Figure 3 has been re-labelled as Figures 3A and 3B to correspond with the designating numerals. The specific changes are marked in red on the marked-up copy of the amended drawings attached as Schedule I hereto. Acceptance and entry of the changes is respectfully requested.

The Examiner rejected claims 3, 8, 9, 10 and 14 as being indefinite as it was not clear to the Examiner which curvature is being referred to.

As discussed, the general profile of the heel region of Applicant's invention resembles a section of a sphere having a centre of radius approximately where the sagittal plane centre of mass and the long axis of rotation of a wearer's foot coincide.

Applicant has amended the claims to combine claims 2 and 3 and to clarify the language to simply refer to a radius of curvature (rather than a longitudinal radius of curvature). Furthermore Applicant has amended claims 7, 8 and 9 to combine those claims and to also specify a radius of curvature coincident both with a long axis of rotation of the wearer's foot and a sagittal plane centre of mass of a calcaneus of the wearer's foot.

For the sake of further clarity, Applicant encloses as Schedule II marked-up copies of the pages containing Figures 5 and 7 as originally published. The pages have been marked up in red to indicate the radius being referred to. Figure 5 illustrates what was previously referred to as a transverse radius of curvature. Figure 7 has been marked to indicate what was previously referred to as the longitudinal radius of curvature.

Applicant notes that despite the Examiner's suggestion that the former language was confusing, the Examiner nevertheless correctly interpreted the language in paragraph 9 of the above Examiner's action.

The Examiner rejected claims 2-4 as being anticipated by U.S. Patent No. 5,317,819 (Ellis). The Examiner states that Ellis shows a curvature within the scope of Applicant's claims.

Applicant respectfully points out that the curvature shown by Ellis is significantly

different than Applicant's invention, particularly as reflected in the amended claims. In support of Applicant's submission, Applicant encloses as Schedule III hereto a marked-up version of Figures 5b and 6 of the Ellis illustrations. The curvature according to Applicant's invention is illustrated in a broken red line. The radius of curvature according to Applicant's invention is indicated by a red arrow labelled "R". In contrast, the radii of Ellis are indicated with blue arrows labelled "r".

Quite clearly the curvatures according to Applicant's invention do not coincide with the curvature of Ellis.

Referring to Figure 5b of Ellis, the Ellis structure has a flat base with curved edges, the curved edges have relatively small radii (as compared to radius R). Furthermore the radii do not coincide but rather, have the respective centres of curvature.

Referring to Figure 6, the centre of curvature of the radius r of Ellis is nowhere near where one would expect to find the centre of mass of the calcaneus of a wearer's foot.

Applicant has amended claim 2 to incorporate the language of claim 3 and to clarify the language as discussed above by making reference to a single radius of curvature. Applicant respectfully submits that as the Ellis structure lacks a single radius and lacks a centre of radius corresponding to the structure defined in Applicant's claims, Ellis cannot anticipate Applicant's invention as presently claimed.

During the interview the Examiner raised a concern with using the centre of mass of a calcaneus of a wearer's foot to define the invention as being indefinite. Applicant respectfully disagrees.

The subject matter of the claim is an article of footwear. It was well known that articles of footwear come in varying sizes to accommodate the foot size of a variety of wearers. The incremental difference between sizes is relatively small, typically on the order of  $\frac{1}{2}$  inch or less. Although there are small variances between the skeletal structure of any two feet within a certain size range, the variances with respect to the location of the calcaneus are relatively small. Accordingly for a given foot/shoe size, a person skilled in the relevant art would be able to make a relatively accurate approximation of the

expected location of the calcaneus of a wearer's foot. Accordingly, keeping in mind that a patent is directed at a person skilled in the relevant art, the particular characterization selected by the Applicant (i.e. the centre of mass of a calcaneus of a wearer's foot) would not be considered indefinite. As an expert in footwear and physiology, Applicant makes this assertion with confidence and respectfully requests that the Examiner defer to Applicant's expertise on this point.

The Examiner rejected claims 10/2, 10/4 and 11-15 as being obvious in view of Ellis and U.S. Patent No. 6,301,807 (Gardiner).

Claims 10/2 and 10/4 depend from claim 2 as amended which is discussed above. For the reasons set out above, there is nothing in the Ellis reference which would lead one to the unique heel configuration of Applicant's article of footwear. The Gardiner reference merely relates to an insole arrangement with a dome shaped catalyst. Accordingly whether or not an insole unit according to Gardiner is incorporated in the footwear, the fact remains that the overall configuration claimed, which includes the heel configuration is novel. Novelty is not dispelled by the further use of a dome shaped catalyst for interfacing with the plantar aspect of a wearer's foot. Accordingly Applicant respectfully submits that in view of the amendments to claim 2 and for the reasons set out above, claims 10/2 and 10/4 are patentable over the cited references.

Claim 11 as amended depends from claim 7 which defines an article of footwear having a heel region configured in accordance with that defined by amended claim 2 and discussed at length above with respect to the Ellis reference. In other words, claim 7 and in turn claim 11 are patentably distinguishable from Ellis in view of the substantially different nature of the curvature of the heel region. As claims 11-15 depend from amended claim 7, the configuration of the heel region is included in the article of footwear defined by those claims. As such an article of footwear is not taught or suggested by either of the cited references, Applicant respectfully submits that claims 11-15 are patentable over the cited references.

Applicant has also amended claim 11 to make reference to a "wearer's" foot rather than a "human" foot to be consistent with earlier claim amendments and to more specifically

characterize the relevant foot as being one which would fit the article of footwear, rather than any human foot.

Applicant respectfully submits that the application as amended is in condition for allowance for the reasons set out above and action toward that goal is respectfully requested.

Applicant further respectfully submits that, should the Examiner find claims 1 and 7 allowable, the remaining claims are species of a broader allowable genus and accordingly are also allowable.

Applicant once again thanks the Examiner for the courtesy of granting an interview. Should there be any matters outstanding which may be better or more efficiently handled by telephone rather than through correspondence, the Examiner is invited to contact Applicant's agent at 416-862-5790, collect if necessary.

Respectfully submitted,



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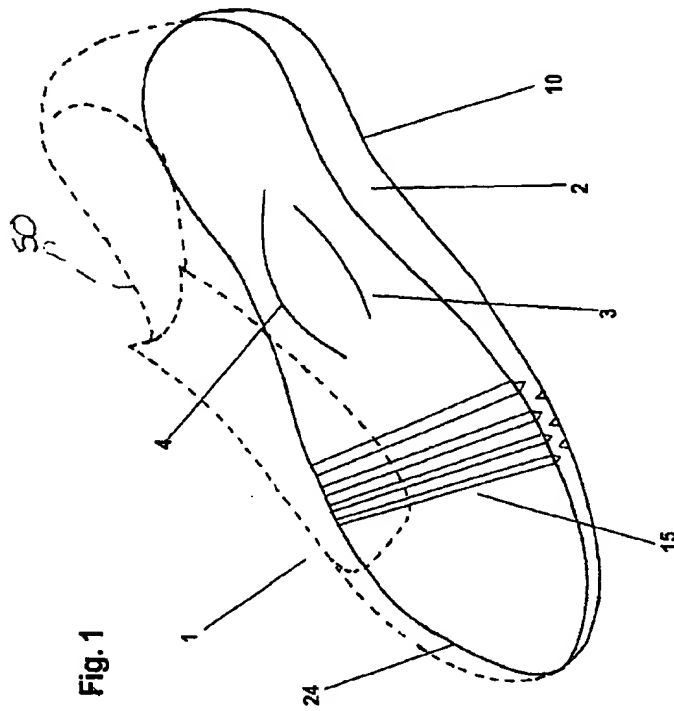
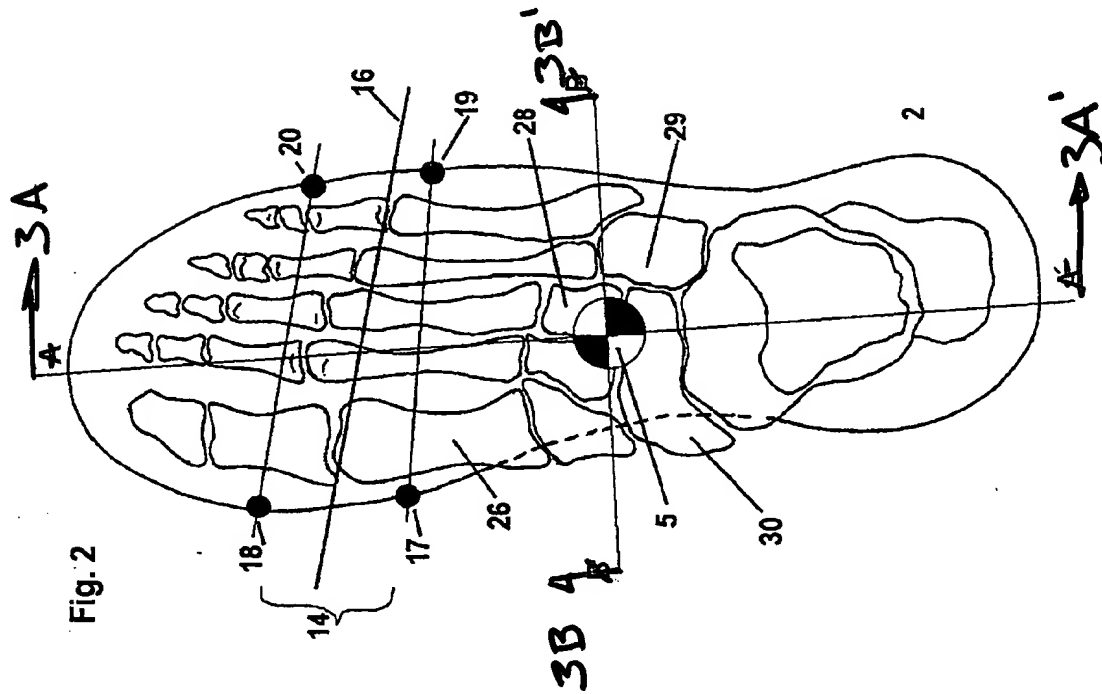
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**Drawing Amendments**

Applicant has amended Figure 2 to include arrows and designating numerals corresponding to the figure numbers of the sectional view.

Figure 3 has been re-labelled as Figures 3A and 3B to correspond with the designating numerals. The specific changes are marked in red on the enclosed marked-up copy of the amended drawings attached as Schedule I hereto.



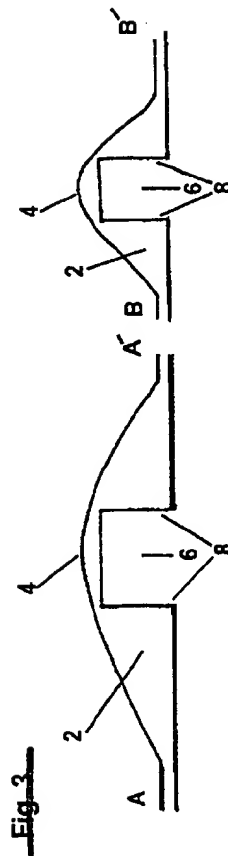
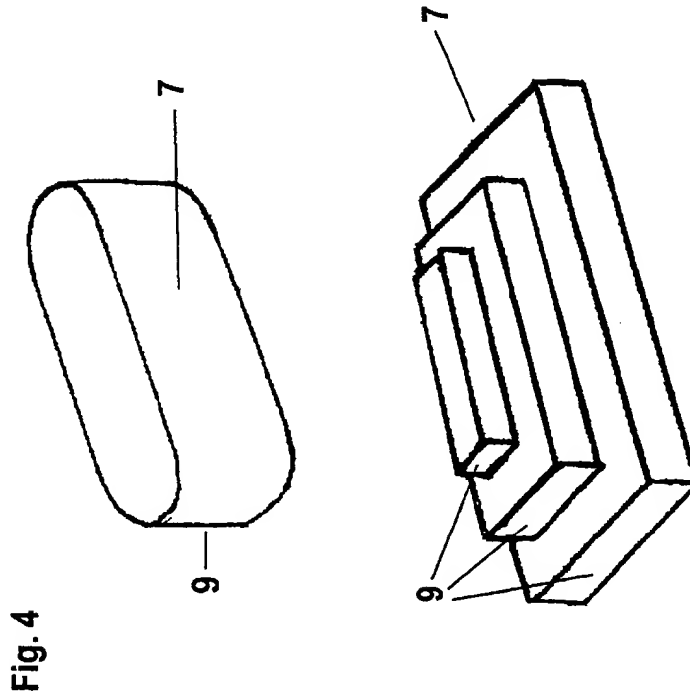


Fig 3B

Fig 3A